AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

- 1. (previously presented): A resin composition comprising:
- (A) an alkali-soluble resin;
- (B) an infrared absorbing agent having a maximum absorption wavelength in the range of 760 nm to 1200nm; and
 - (C) a thiol compound,

wherein a solubility of the resin composition in an alkaline aqueous solution is changed by exposure with an infrared laser beam.

- 2. (previously presented): A resin composition according to claim 1, further comprising:
- (D) a compound that is thermally decomposable and substantially reduces a solubility of the alkali-soluble resin in an undecomposed state.
- 3. (previously presented): A resin composition according to claim 2, wherein the compound that is thermally decomposable and substantially reduces a solubility of the alkalisoluble resin in an undecomposed state is a compound selected from a group consisting of onium salts, o-quinonediazide compounds, and alkyl sulfonate esters.

4. (original): A resin composition according to claim 1, wherein the thiol compound can tautomerize as shown by the following general formula (1):

wherein X represents a trivalent atom or atomic group.

- 5. (original): A resin composition according to claim 4, wherein X in general formula (1) is a nitrogen atom or a methine group.
- 6. (original): A resin composition according to claim 1, wherein the thiol compound is an aliphatic hydrocarbon having an SH group on a side chain or at a terminal.
- 7. (previously presented): A resin composition according to claim 1, wherein the thiol compound is a cyclic hydrocarbon substituted by an SH group or a heterocyclic compound substituted by an SH group.
- 8. (previously presented): A resin composition according to claim 7, wherein the cyclic hydrocarbon substituted by an SH group is a compound represented by the following general formula:

wherein in the general formula, R¹ through R⁵ each independently represent a hydrogen atom, an alkyl group, a halogen atom, an alkoxy group, or a mercapto group.

9. (previously presented): A resin composition according to claim 7, wherein the heterocyclic compound substituted by an SH group has two nitrogen atoms in the heterocyclic compound and is represented by the following general formula:

wherein in the general formula, R represents a hydrogen atom or an alkyl group.

10. (previously presented): A resin composition according to claim 7, wherein the heterocyclic compound substituted by an SH group has three nitrogen atoms in the heterocyclic compound and is represented by at least one of the following general formulae:

General formulae

wherein in the general formulae, R^1 through R^6 each independently represent a hydrogen atom, an alkyl group, an aryl group, an amino group, or a mercapto group, at least one of R^1 and R^3 represents a mercapto group, and at least one of R^4 and R^6 represents a mercapto group.

11. (previously presented): A resin composition according to claim 7, wherein the heterocyclic compound substituted by an SH group has four nitrogen atoms in the heterocyclic compound and is represented by the following general formula:

wherein in the general formula, R represent an alkyl group or an aryl group, and when R represents an aryl group, R may represent an aryl group that has a substituent selected from the group consisting of a hydroxyl group, a carbamoyl group, and a carboxyl group.

12. (previously presented): A resin composition according to claim 7, wherein the heterocyclic compound substituted by an SH group is a compound represented by the following general formula:

wherein in general formula, R represents an alkyl group, an amino group, an alkylthio group, or a mercapto group.

13. (previously presented): A resin composition according to claim 7, wherein the heterocyclic compound substituted by an SH group is a compound represented by the following general formula:

$$R^1$$
 SH General formula

wherein in general formula, R¹ and R² each independently represent a hydrogen atom, an alkyl group, an alkoxy group, a halogen atom, a carbamoyl group, a nitro group, or a sulfonate group, and Z represents –NH-, an oxygen atom, or a sulfur atom.

14. (previously presented): A resin composition according to claim 7, wherein the heterocyclic compound substituted by an SH group is a compound represented by the following general formula:

wherein in the general formula, R¹ and R² each independently represent a hydrogen atom, an alkyl group, an alkoxy group, a halogen atom, a carbamoyl group, a nitro group, or a sulfonate group, and Z represents an oxygen atom or a sulfur atom.

15. (previously presented): A resin composition according to claim 7, wherein the heterocyclic compound substituted by an SH group is a compound represented by the following formula:

$$R^3$$
 R^3
 R^2
 R^3
 R^3

wherein in the general formula, R¹ through R³ each independently represent a hydrogen atom, an alkyl group, a haloalkyl group, a hydroxyl group, an amino group, a nitroso group, or a mercapto group.

- 16. (original): A resin composition according to claim 1, wherein the thiol compound is a compound obtained by substituting an SH group for a substituent on a cyclic hydrocarbon.
- 17. (original): A resin composition according to claim 1, wherein the thiol compound is contained in an amount of 0.2 to 20% by mass based on a total solids content of the resin composition.
- 18. (withdrawn) A positive-type image recording layer containing a resin composition according to claim 1.
- 19. (withdrawn): A positive-type image recording layer according to claim 18, wherein the thiol compound can tautomerize as shown by the following general formula (1):

SUPPLEMENTAL AMENDMENT UNDER 37 C.F.R. § 1.111 U.S. Application No. 10/618,068

Attorney Docket No. Q76351

wherein X represents a trivalent atom or atomic group.

- 20. (withdrawn): A negative-type image recording layer containing a resin composition according to claim 1.
- 21. (currently amended): A resin composition according to claim 1, wherein the resin composition is a resin composition for a positive-type used in a planographic printing plate precursor.